

## Noise Waiver Determination

**Applicant:** Ferguson Neudorf Glass  
**Application Date:** March 2, 2018  
**Address of Activity:** 4747 Bethesda Avenue, Bethesda  
**Proposed Activity:** Nighttime installation of curtain wall/window sections utilizing the on-site electric tower crane. See noise waiver application for detailed description of work.

### Justification Provided by Applicant for Waiver Request:

1. Space constraints severely limit the ability to station an adequate sized portable crane capable of reaching the entire building perimeter.
2. Positioning a large portable crane would likely require the complete closure of Bethesda Ave. significantly impacting traffic for nearby residents and businesses.
3. The tower crane at the site is appropriately sized to reach the entire site perimeter allowing it to be utilized for the curtain wall installation.
4. The tower crane is electric and thereby eliminates noise from the internal combustion engine used on a portable crane.
5. After-hours use of the tower crane would minimize risk to employees, pedestrians and residents traveling to and from the nearby office and residential buildings.
6. The route for delivery trucks is designed to be pull through and will eliminate backup alarm noise.

**Grant Noise Waiver?** Yes, with terms and conditions

**Rationale for Decision:** Utilizing a portable crane at this site is severely hampered by space constraints imposed by three other nearby projects (Purple Line Station, Bethesda Metro South Entrance and 7272 Wisconsin Ave.). The after-hours utilization of the existing electric tower crane eliminates the traffic and safety concerns associated with using a portable crane. The applicant has contracted with Acoustics 2 Acoustical Consultants to evaluate noise associated with a similar curtain wall installation being performed by Ferguson Neudorf at 655 New York Ave., NW Washington DC. Curtain wall panels are lifted off trucks and hoisted into place where workers guide the panels into place. The panels are gently set into tracks and bolted into place using hand wrenches. No power tools are used, which minimizes impact noise. Workers use radios to communicate during the lifting and placement process.

The applicant has demonstrated sufficient public benefit related to this waiver request by the following:

- Decreasing the time required to complete the enclosure of the building which will help contain construction noise inside the building, and therefore reduce construction noise impacts to nearby residential buildings.
- Reducing pedestrian and traffic impacts related to the construction activities.

The Terms and Conditions included in the waiver require regular noise monitoring, and review of the results of the monitoring with DEP. The waiver can be modified or revoked if the results of the monitoring indicate that the noise received by nearby receptors is greater than anticipated.

**Terms and Conditions:**

1. This Temporary Noise Waiver applies only to after-hours curtain wall installation work. No other after-hours work can be performed as part of this Temporary Noise Waiver.
2. Trucks delivering curtain wall sections shall utilize a pull through traffic pattern to avoid backup alarm noise and truck engines shall be shut off while the truck is stationary and being unloaded.
3. Only non-impact hand tools shall be used for after-hours curtain wall installation work.
4. All reasonable efforts should be made to perform the noisiest activities as early in evening as possible.
5. Machinery shall be inspected daily and equipped with proper noise attenuation measures to minimize construction noise, including, but not limited to well-maintained and effective mufflers. Moving parts shall be well lubricated to avoid unnecessary noise from squeaking parts. Machinery access doors and hatches should remain closed when the units are in operation and all machinery should be operated at the minimum level necessary to get the job done. Minimize banging, clattering, buzzing and other annoying types of noises.
6. Noise mitigation barriers should be erected around loud pieces of stationary machinery (e.g., generators, pumps, etc.).
7. All onsite staff, including delivery truck drivers, should be notified of noise mitigation procedures prior to work.
8. Where possible, the local power grid should be used to reduce the use of internal combustion powered machinery.
9. Prolonged idling of machinery and vehicles must be avoided. If machinery or vehicles are not utilized for long periods, they should be shut off to reduce idling noise.
10. Regular communications must be provided to nearby residential buildings, so they are aware of the work schedule and expected noise related to construction activities.
11. Noise levels must be monitored at sensitive receptor locations around the site. The decibel levels and locations of the monitoring sites must be reported to DEP and kept in a log on site, which shall be available for inspection and review upon request.
12. A log must be maintained on site containing detailed information concerning any complaints received regarding noise from this construction project.
13. DEP may suspend or revoke this approval for any violation of the terms and conditions, and may make modifications to the terms and conditions based on the results of noise monitoring or the noise impact of certain activities.
14. A copy of this Temporary Noise Waiver must be available at the work site.